

Rugby—Its Soils and Their Adaptability.

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[CONTINUED.]

CROPS.

It is not assumed that corn and wheat will do remarkably well, or be very profitable on the Cumberland Plateau. The first requires rich, alluvial soil, for a heavy crop. In the natural state of the soil, in this region, large yields of corn cannot be expected. From twenty to twenty-five bushels per acre is as much as can be expected, and often it will fall below these figures. But by following the directions herein given, for the improvement of the soil, after a few years a heavier yield may be expected. Corn is a great exhauster of the soil, and, therefore, the settler should be exceedingly careful not to raise frequent crops of it on the same piece of land. This should be specially so until the land is brought up to a higher degree of productiveness. The land should not be put in corn more than once in every five years. On such land a corn crop is not profitable. Raise as little as possible, and supply its place with other things.

WHEAT.

Wheat will not make a remunerative crop upon the virgin soil of the Plateau, but experiments have demonstrated the fact that by the application of two cords of manure to the acre fifteen bushels may be raised. The best course to pursue with this crop is to sow after a pea fallow, and when the wheat crop is harvested the succeeding summer break the land and sow again in peas, the haulm of which will be ready to turn under in time to sow a crop of wheat the same autumn. By continuing this practice from year to year, aiding the land with occasional dressings of manure, very good wheat crops may be produced on the same field for a succession of years. The writer has known some very poor sandy soils to be brought up to a high degree of fertility by pursuing this method. It is worthy of trial by the colonists.

OATS.

The remarks made above in reference to corn are also applicable to oats. They exhaust the productive capacity of the soil very rapidly. No wise farmer can afford to exhaust his soil in order to get a particular crop, especially a second crop from his land. To build up, and not to exhaust, is true wisdom. He that does thus will get rich, while the opposite policy inevitably leads to poverty.

RYE.

The climate of Rugby is well suited to rye. Where ever the soil is in good condition it will do well. It requires good, rich soil. Rye makes a fine winter pasture. When plowed under in the spring, after it gets a fair start in growth, it makes a fine fertilizer. It can, therefore, be sown with profit for a fall and winter pasturage, and also be used for a fertilizer the next spring or summer.

SWEET POTATOES.

Sweet potatoes do well on the sandy soil on the Plateau. They love a sandy loam, and require a moderately rich soil. If very rich, they run too much to vines and leaves. Stable manure, well rotted, and wood ashes are excellent fertilizers for them. Where the soil is suitable, and the season good, the yield should be from seventy-five to one hundred bushels per acre. Further south and in a lower altitude, the yield per acre is much greater, often reaching from two to three hundred bushels.

For the ordinary purposes of sustaining life, nothing is cheaper or better. For cattle, horses or hogs, they have been proved by experiments to be equal to corn, bushel for bushel. They contain quite as much nutriment, and are more healthy. They are fed either raw or after they have been cooked.

At Rugby sweet potatoes can be made valuable for marketing. They are a tropical production, and are much sweeter grown in a warm climate. In Cincinnati and other northern cities they command high prices, and especially the early ones. There is no good reason why those cities should not draw their main supply from the Cumberland Plateau.

As the sweet potato loves a hot soil, it should be planted on the south hill sides or slopes. With good cultivation one hundred and fifty bushels may be produced with ease upon an acre of land.

IRISH POTATOES.

The Irish potatoes raised on the high Cumberland lands are very superior, having an excellent flavor. They are greatly superior to those raised in the valleys of east or middle Tennessee. They are also very productive on these lands. In them the farmers of Rugby have an unfailing source of income. All the cotton States draw their supplies of this universal article of food for winter consumption from the States north of them. Early potatoes can be raised in the Southern States, but late ones for winter do not do well. Knoxville, Chattanooga and Atlanta will always be good markets for good winter potatoes. Hundreds of barrels, raised in the North, are sold every spring in Knoxville at good prices.

While there must ever remain a good market in the South for winter potatoes, Cincinnati will furnish a market for the early ones. They can be put into this market from Rugby several days, perhaps ten days, earlier than they can be from Ohio or Northern Kentucky. The very early ones command very high prices.

The soil suited for Irish potatoes is a rich loam. It cannot be too rich. They will do but little good on exhausted or very poor land. Well rotted stable manure, wood ashes, ground bone, hair, plaster, forest leaves, are all good fertilizers for them. Wood ashes are perhaps the best of all.

Early potatoes should be planted in February if possible, and if the soil is suitably manured three hundred bushels per acre is not considered an exorbitant crop. Near Tracy City this number of bushels have been often gathered. A southern exposure is best, if early maturity is desired. But for a late crop the ground should always be, when practicable, low bottom, or north hill sides. Our fall seasons are generally dry and hot, and therefore such ground should be chosen as will be least affected by the heat or drought. The early crop can be planted early in February, and the late one the last of June or very early in July. The best varieties of early potato, yet introduced, are the Early Rose and Snow Flake, and for the late crop the Peach Blow, Pink Eye, and Mountain Sprout. Northern grown seed, especially for the early crop, is decidedly the best; but if a second crop of early potatoes is grown they make the best seed. This can be done in this climate by digging the first crop in June, exposing them to the air for a few days, and then planting them in land well prepared. This practice is becoming very common about Nashville.

VEGETABLES.

Nearly all vegetables will do well in the climate of Rugby, where the soil is in good condition. But it must be borne in mind that all the vegetables, like corn and Irish potatoes, require rich food. It is in vain to expect good returns without good care and rich soil.

If gardening for the Cincinnati market should be the object of any of the colonists, they had better raise a general assortment, and not confine themselves to a few articles, so that if one fails others may succeed. In gardening it is never safe to rely on one or two articles. Besides, if the gardener has to attend market, he had better go with a good assortment and supply.

There is one vegetable to which we invite special attention, and that is

CABBAGE.

Perhaps no vegetable is so universally eaten, and so largely consumed in the United States as cabbage. It forms a part of the daily food of nearly every family during the greatest part of the year. It is peculiarly the poor man's food. The reason is two fold: first, because most persons are fond of it, and second, because more food can be purchased of it for a small sum than of nearly anything else. It comes into use early in June, and continues in mar-

ket until the next spring, frequently until the new crop is ready for use. It is always in demand. It is easily kept through the winter; and in the South, in those localities where the soil and climate are suitable for its growth, no crop will pay better.

The settlers at Rugby must bear in mind that south of Tennessee it cannot be grown, except in high mountainous regions. Its habitat is a cold climate. Hence, in the hot Southern States it does no good. They must depend on the North for their fall and winter supply. Here, then, is this wide region, from Wilmington to New Orleans, with all the interior, to be supplied. The Cumberland Plateau is the nearest region suitable for the growth of fine cabbage. Even at Knoxville, with a country north of it moderately well adapted to its growth, large quantities of it are brought from Virginia every winter and spring and sold. No doubt this is true of Chattanooga and Nashville also.

The Cumberland lands and climate are admirably suited for cabbage. Where the lands are rich, or made rich with barn-yard manure, or with bone dust, phosphate or guano, all of which are admirable fertilizers for it, it can be grown in great perfection. The writer saw a head grown in the garden of Rugby, by Mr. Hill, on poor, old land, which weighed, about the 6th of October last, before it was done growing, ten pounds. Mr. Mosier, at Sunbright, has frequently raised heads weighing from fifteen to twenty pounds, as the writer is informed.

Early cabbage can no doubt be profitably raised for the Cincinnati market. But it is late cabbage which can be most profitably raised for the Chattanooga, Atlanta and other Southern markets.

That cabbage can be made a profitable crop at Rugby, with the liberal use of fertilizers, is susceptible of the clearest demonstration. If the plants are three feet apart, 4,840 can be grown on an acre; if two-and-a-half feet, 6,969 per acre. The latter distance is sufficiently far apart if the crop is raised by hand; the former is better if a plow is used in cultivation. Suppose the plants make heads which weigh, on an average, five pounds, and that they will yield in market a cent a pound. Then an acre planted two-and-a-half feet apart, would produce \$348.45 worth of cabbage, and at three feet it would amount to \$242.00. If but half a cent a pound is realized, as clear profit, the result would be, in the one case, \$174.22, and in the other, \$121.00 per acre. With a good season, good culture, and with thorough fertilization, there is every probability that the heads can be made to average eight or ten pounds. The writer saw cabbage selling in Knoxville, at retail, by the small dealers, January 4, 1881, at four cents a pound. The winter price is usually as much as two-and-a-half cents with the hucksters; of course the producer can get no such price at wholesale.

No special skill is required to raise or take care of cabbage. Aside from planting, it requires no more care or labor than corn. It can be easily kept through winter and until spring. The main point always to be kept in mind is, that it imperatively requires rich, well pulverized soil, or the liberal use of stimulating fertilizers. Late cabbage should by all means be planted on low, moist, bottom lands, or on north hill sides. The ground cannot be made too rich for it. Early cabbage should have a southern exposure.

The best varieties are, for early, Early Wyman and Early Jersey Wakefield; for late, Large Late Drumhead and Large Flat Dutch. Under all circumstances it is safe to assume that cabbage will yield as clear profit one-half cent a pound, and frequently much more.

FRUIT GROWING.

All the fruits of the temperate zone, possibly excepting peaches, as far as tested, do well on the tableland of Tennessee.

APPLES.

Apples do remarkably well, and can be made a great success. Those grown on the Plateau have a fine flavor, fine color, and keep well.